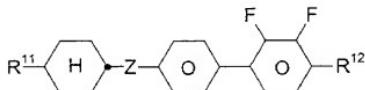


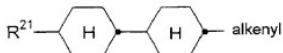
Claims:

1. A liquid-crystalline medium based on a mixture of
polar compounds having negative dielectric
5 anisotropy, comprising at least one compound of
formula II



II

10 and at least one compound of formula I2



I2

in which

15 R¹¹, R¹² and R²¹ are each, independently of one another, alkyl or alkenyl having up to 15 carbon atoms which is unsubstituted, monosubstituted by CN or CF₃, or at least monosubstituted by halogen, where one or more CH₂ groups in these radicals may also, in each case independently of one another, be
20 replaced by -O-, -S-,  , -C≡C-, -CO-, -CO-O-, O-CO- or -O-CO-O- in such a way that O atoms are not linked directly to one another,
25

30

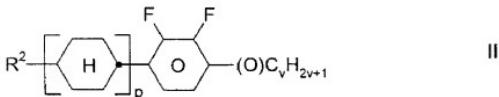
Z

is -C₂H₄- , -CH=CH- , -CF₂O- , -OCF₂- or a single bond, and

XEROX 10747860

alkenyl is straight-chain alkenyl having
2-6 carbon atoms.

5 2. The medium according to claim 1, additionally comprising at least one compound of formula II



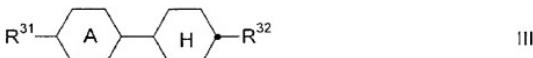
10 in which

R² is independently as defined for R¹¹, R¹² and R²¹,

15 p is 1 or 2, and

v is 1 to 6.

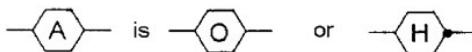
20 3. The medium according to claim 1, additionally comprising at least one compound of formula III



in which

25

R³¹ and R³² are each, independently of one another, a straight-chain alkyl or alkyloxy radical having 1-12 carbon atoms, and



30

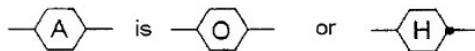
4. The medium according to claim 2, additionally comprising at least one compound of formula III



5

in which

R³¹ and R³² are each, independently of one another, a straight-chain alkyl or alkyloxy radical having 1-12 carbon atoms, and



- 10 5. The medium according to claim 1, comprising at least three compounds of formulae I1 or I2.

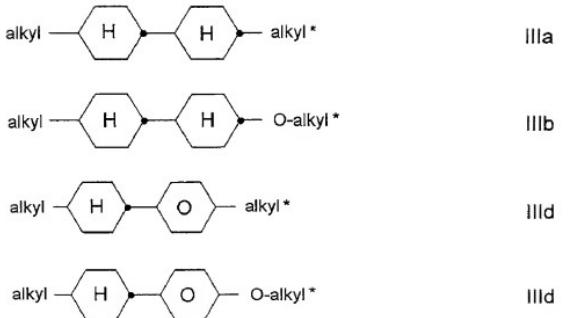
- 15 6. The medium according to claim 1, having a proportion of compounds of formula I1 in the total mixture of at least 10% by weight.

- 20 7. The medium according to claim 1, having a proportion of compounds of formula I2 in the total mixture of at least 5% by weight.

- 25 8. The medium according to claim 2, having a proportion of compounds of formula II in the total mixture of at least 20% by weight.

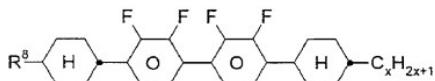
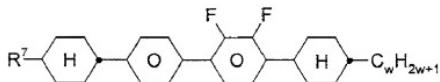
- 30 9. The medium according to claim 3, having a proportion of compounds of formula III in the total mixture of at least 5% by weight.

10. The liquid-crystalline medium according to claim 3, comprising at least one compound of formulae IIIa to IIId:



in which

- 5 alkyl and
 alkyl* are each, independently of one another,
 straight-chain alkyl having 1-6 carbon
 atoms.
- 10 11. The liquid-crystalline medium according to claim
 10, comprising at least one compound of formula
 IIIa, at least one compound of formula IIIb, or a
 mixture thereof.
- 15 12. The liquid-crystalline medium according to claim 1,
 additionally comprising at least one compound of
 the formulae



in which

R⁷ and R⁸ are each, independently of one another, as defined for R¹¹, R¹² and R²¹, and

5 w and x are each, independently of one another, from 1 to 6.

13. The liquid-crystalline medium according to claim 2, comprising

10 10-40% by weight of at least one compound of formula II,

15 5-30% by weight of at least one compound of formula I2,

and

20 20-70% by weight of at least one compound of formula II.

25 14. An electro-optical display having active matrix addressing based on ECB effect or IPS effect, comprising as a dielectric, a liquid-crystalline medium according to claim 1.

30 15. An electro-optical display comprising, as a dielectric, a liquid-crystalline medium according to claim 1.

35 16. An electro-optical display comprising, as a dielectric, a liquid-crystalline medium according to claim 2.

17. An electro-optical display comprising, as a dielectric, a liquid-crystalline medium according to claim 3.